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An Exploration of Social Change in Tropical and Sub-Tropical Rural Agrarian Societies

Cole D. Genge

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AN EXPLORATION OF SOCIAL CHANGE IN TOPICAL AND SUB-TROPICAL RURAL AGRARIAN SOCIETIES

A Thesis Presented

by

COLE D. GENGE

Submitted to the Center for International Education of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of

MASTER OF EDUCATION

May 1999

School of Education
DEDICATION

To my loving and supportive wife
Jenny P. Genge
ACKNOWLEDGEMENTS

I would like to thank my advisor, Robert J. Miltz, for his guidance and support over the course of my master's program. I would also like to extend my thanks to friends and colleagues who gracefully consented to participate in my research project and in the process inspired me with their knowledge and experiences. Finally, a special thank you to all those who supported and encouraged me to stay focused even when things got murky.
ABSTRACT

AN EXPLORATION OF SOCIAL CHANGE IN TOPICAL AND SUB-TROPICAL RURAL AGRARIAN SOCIETIES

MAY 1999

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M.Ed., UNIVERSITY OF MASSACHUSETTS AMHERST
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A qualitative research project on the dynamics of social change in rural agrarian societies in the tropics and sub-tropics was conducted during the months of October and December of 1998 and January of this year. The research topic emerged, in part, from the researcher's interest on issues related to community development in the third world, environmental issues in the tropics, and the promotion of social change for the benefit of marginalized peoples.

This preliminary study of social change in the rural tropics was the result of five case studies with individuals living in the Pioneer Valley region of western Massachusetts who either lived and/or worked with rural agrarian communities in the tropics and sub-tropics. Key to the researcher was the notion of seeking overarching issues affecting social change across various continents. The researcher was aware that many factors motivating change are neither voluntary nor beneficial to the community, therefore he was searching for both positive and/or negative impacts affecting community social change. Preliminary findings indicate there are parallel trends affecting social change in agrarian communities across the tropics and subtropics.

The following document is an exploration into one of the themes that remained consistent over the course of the interviewing process, namely, how does change occur in poverty stricken agrarian regions of the world?
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CHAPTER 1

INTRODUCTION: ABOUT THE STUDY

A. Introduction

A qualitative research project on the dynamics of social change in rural agrarian societies in the tropics and subtropics was conducted during the months of October and December of 1998 and January of this year. The topic emerged, in part, from the researcher’s interest on issues related to community development in the third world, environmental issues in the tropics, and the promotion of social change for the benefit of marginalized peoples.

This preliminary study of social change in the rural tropics was the result of five case studies with individuals living in the ‘Pioneer Valley’ region of western Massachusetts who either lived and/or worked with rural agrarian communities in the tropics and subtropics. Key to the researcher was the notion of seeking overarching issues affecting social change across various continents. The researcher was aware that many factors motivating change are neither voluntary nor beneficial to the community; therefore he was searching for both positive and/or negative impacts affecting community social change. Preliminary findings indicate there are parallel trends affecting social change in agrarian communities across the tropics and subtropics.

The following document is an exploration into one of the themes that remained consistent over the course of the interviewing process, namely, how does change occur in poverty stricken agrarian regions of the world? Inherent to the work are the mechanics of how information was obtained, organized, analyzed, and presented.

B. The Research Topic

The conceptual framework for the research is a study of the dynamics of social change as transmitted or learned in rural agrarian societies of the tropical and subtropical regions of the world. The process of change in tropical rural agrarian societies, and the problems and/or issues involved in promoting change for health and
wellbeing are my areas of research interest. The focus is on rural, poor, agrarian societies in the tropics and subtropics as seen, lived and studied by both "insiders" and "outsiders" who currently live or work in Amherst, Massachusetts.

In looking at the subject as a whole, I first began by suggesting there are similar patterns across the tropics and subtropics. These similarities may be reflected in overarching principles such as: "farming in order to feed families," "methods and techniques that have been around for centuries," and "a rich world of traditions." On the whole, people worldwide have suffered as a result of over-use, resource exploitation, and rapid change. Generally, the rural tropics, as with other rural agrarian populations, tend to be resistant to change initially, but once they open their doors, the loss of traditional checks and balances leads to excessive, often uncontrolled change that is damaging both to society and the environment.

How social change comes about in tropical rural agrarian societies and a focus on the process of learning involved in the assimilation of changes in agrarian methods, reforms, and/or criterion are of concern throughout the study. In deed, I am interested in social change that provides the space for maintaining those desirable aspects of culture that often are lost with the infusion of new ways of doing things.

Some questions I explore and areas of interest include the following: What motivates change in impoverished agrarian communities? Are men or women more likely to implement change and leave age-old traditions? When new ideas or techniques are available, what processes of social change are likely to occur before becoming accepted within any given society? What are the effects of the capitalist world economies on rural agrarian populations?

Exploring such questions can potentially lead to a greater understanding of the processes of change in the rural tropics; a region of the world I see is rapidly diminishing in terms of natural wealth and beauty. An exploration of such issues provides a better understanding of how to begin to look at the issues of rural poverty, nutrition, health, education, as well as the protection and care for the environment and its resources. Understanding the dynamics of social change could ultimately provide a platform from which to determine processes that have positive effects on the social
fabric of a community and its natural environment as well as a place from which to judge the extent of damage caused by the impacts of social change in a community.

Rural agrarian communities are generally the most vulnerable elements in society, they are at the bottom of the social, economic, and political "pecking order," as such they have few if any privileges and are caught between two very opposite worlds. These tensions often result in a lose-lose situation for such communities. Unfortunately this scenario is repeated all to often across the globe. Such situations have lasting imprints on social change and these have a profound impact on the environment.

Understanding social change is an aid to the larger issue of education. If done properly both formal and non-formal systems could gain from the conclusions arrived at. However, I believe that non-formal education has a much greater role to play in terms of practice in the field. Moreover, I envision social and economic development operations of scale as the major contributors to the knowledge base of a community. In this sense, social change implies altering the very nature or foundation of an individual's life. If wood gathering, for example, was a child’s job in the past, today not only is her/his job harder to accomplish, but it may imply considerable danger and anxiety to them. Such scenarios were rare in the past but exponential population growth rates, deforestation, and forest degradation have made the job much harder. One of the challenges faced when social changes occur, is that the cannons that lead society in the past no longer are applicable and begin to break down. For example with the issue of wood gathering, the tribal elders solution in the past would be quite different than today. Part of the trouble is that as social norms break down in a group, the group is more likely to be influenced by the outside, which in turn only makes the localized problem larger. Thus, the effective break down of the norms that guide society, from the lowliest to the most complex, begin to signal for the need of an overarching law that establishes a common-ground across the nations.
C. Research Design and Methods

1. Data Collection Approach

The challenge of pursuing a theme on social change in tropical rural agrarian societies while living in New England is the simple fact that the tropics are far away and does not lend itself to study from a distance. In order to work around this issue, I conducted in-depth qualitative interviews with colleagues and friends at the Center for International Education of the University of Massachusetts, Amherst campus who had relevant experience in the tropics and where living in the Amherst - Northampton area.

A case study of social change processes is the research design and method I used for the study. The genre is a case study, meaning I was attempting to understand a larger phenomenon through the intensive study of specific instances. This strategy incorporates both descriptive cultural studies, which I incorporated as a means of highlighting meaning and perspective as well as the different components of social change in agrarian societies.

Case studies are descriptive, heuristic, and inductive. This means a case study incorporates three components: the "material culture" of a qualitative study which are the illustrative intricacies and wealth of a situation; the interactive knowledge or the understanding that comes with experience that layers over itself; and the process of going from the simple to the complex (Rossman and Rallis, 1998; Polanyi, 1962).

These three components provide the tools necessary for forward progress in the 'case study' design. I chose the case study design and used a combination of research generating strategies, which include both evaluation or policy study and descriptive cultural study as an integral part of the design. Essentially, I was looking to focus the research questions and discussions under some form of structural umbrella. Thus, the questions addressed tend to be broad focused and generic. For example: What are the different components of the program? Or, what are the different perspectives of the participants in the program? On the other hand, when I got to the point of organizational methods for writing formats I combined portions from the 'thematic' and 'composite' standard formats (Rossman, 1998a).
When I began this study I was looking for common indicators of social change in rural agrarian societies. I was searching for a means by which to understand processes of change in underprivileged agro-based societies. This was an evolving process first going from a specific case study approach, such as research on Nepalese rural village life and differentiating between the hills region of the country and the lowlands. This idea soon changed and mushroomed into a wider reaching phenomenon. The reasoning behind it was simple; by focusing on the macro scale perspective of the issue I could have a clearer perspective on the effects of social change in the Latin American tropics. Continued research, for example, could involve further exploration into a specific location and cultural group, such as the Callawaya Indians of northwestern Bolivia who have maintained very similar agricultural practices to those used by the Incas over 500 years ago (Seibert, 1994).

In terms of methodology for future studies, I would hope my work enhances others' “artistic sensitivity and endeavor in fieldwork and reporting” (Wolcott, 1995, p. 31). In so doing, I would continue to use the current research framework, though I would seek to steer in a certain direction and change course only when needed; In this sense it is much like 'building the road as we go' (Freire, 1970).

2. Population of Interest

The focus was on a cohort of interviewees - a highly educated group of individuals - each in the process of completing the requirements for a doctoral degree in education. The research target population is diverse, extremely large, widespread around the tropics and subtropics, and far removed from Amherst, Massachusetts. This target population is understood to represent rural farmers who are poor and who as a group face constant threats from governments, economic systems, war, and natural disasters among others. They are a vulnerable group when seen from a global perspective. While there are exceptions to such assertions, the target population tends to be at the bottom of the economic/social/political pyramid. Paradoxically, it is also this group that is most resilient to changes inflicted upon them. Crass generalizations on the nature of this large and diverse group of people have been made in order to
better begin to discern patterns that transcend languages, nationality and skin color among others.

The regions of the world selected reflect the diversity of backgrounds and experiences of the individuals interviewed. Interviewees had all grown up on rural farms in the tropics and sub-tropics or worked extensively with tropical rural agrarian communities. They were in all cases doctoral students of the School of Education, at the University of Massachusetts. As such, there are at least two sources of error in the data portrayed: information is second hand, as it is coming not from the field directly but rather from the interviewees own perception of what is reality in the field (in most cases they had not been in the field for several years) and the fact that all of the interviewees were doctoral students and had been trained for several semesters, implies there are increased possibilities of similar socialization patterns learned through a common exposure to an institutional culture. In either case, the data gathered were used freely in the writing of this document.

The interviewees are individuals who have backgrounds in agriculture, forestry, entomology, rural development, and education. They are professionals who have worked in their respective fields of interest for several years and have for the time being taken time off to continue their education in the US. Their experiences have in all five cases made a profound impact on them individually and have lead them to choose paths of some form of service for the betterment of others. This last point is encouraging in the face of social change and the implications it has for many people around the world.

3. Data Gathering

Data was gathered from five interviews during the months of October and December of 1998 and January of 1999. All of the interviews were conducted at Amherst, either at the University of Massachusetts campus or one of the university housing complexes (including both dormitories and family housing). The areas of expertise were focused on five major countries, though in most cases the interviewees had other country experiences they shared as well, in total there were 13 countries represented.
Table 1 - Data Gathering Table

<table>
<thead>
<tr>
<th>Interviewee Name</th>
<th>Date of Interview</th>
<th>Time of Interview</th>
<th>Place of Interview</th>
<th>Major Country Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arturo</td>
<td>October 12, 1998</td>
<td>3:00 to 5:00 p.m.</td>
<td>Hills South, UM</td>
<td>Nepal</td>
</tr>
<tr>
<td>Enrique</td>
<td>October 19, 1998</td>
<td>2:00 to 3:30 p.m.</td>
<td>Hills South, UM</td>
<td>Sudan, Yemen</td>
</tr>
<tr>
<td>Lucas</td>
<td>October 7, 1998</td>
<td>12:00 to 2:00 p.m.</td>
<td>Hills South, UM</td>
<td>Tunisia, Nepal, Puerto Rico, Yemen</td>
</tr>
<tr>
<td>Miguel</td>
<td>December 22, 1998</td>
<td>11:00 to 1:45 p.m.</td>
<td>North Village, UM</td>
<td>Madagascar, Benin, Mali, Senegal, Lesotho</td>
</tr>
<tr>
<td>Marcela</td>
<td>January 23, 1999</td>
<td>3:00 to 5:15 p.m.</td>
<td>Prince Dorms, UM</td>
<td>Philippines, Bhutan</td>
</tr>
</tbody>
</table>

Compiled by Cole Genge.

Interviews were conducted in the spirit of the traditional interview guide, where a set of topics were discussed using a goal oriented focus thereby conveying the data of research interest while keeping the space open for the interviewee's individuality and experiences to flower. Among the strategies used throughout the study was a strong emphasis on hypothetical and descriptive questions. These provided the grounding for informed speculation and a better understanding of certain particulars (Rossman, 1998b). The interviews were taped and later transcribed. Observations were short, one per interviewee and no longer than one page in length. Material culture was provided in the form of sketches on two occasions over the course of the interview process.

The decision to collect the sampling data as it was done was a simple one. It was convenient, economic, and less rigorous on the interviewer. However, with the decision to forgo other options, the possibility of lost data in terms of non-lexicon cues such as proximics and kinetics may have been lost as well. On the other hand, the use of a tape recorder did allow for the observation of speech patterns such as chronimics and paralinguistics despite the fact these are not mention in the analysis (Rossman, 1998b).
Participant collaboration in data gathering was prompt and amicable in all five cases. The interviewees were in my same academic department and as such, I faced almost certain acceptance given the general sense of camaraderie and solidarity among its members. In all cases the participants involved were candid and forthcoming, even appreciative of my asking for the privilege of an interview, to the extent that all interviewees expressed their thanks in revisiting experiences that were not at the forefront of their thoughts.

4. Processes of Data Analysis

The six phases of analytic procedure mentioned by Rossman and Rallis (1998) were incorporated in the process and include: organizing; familiarizing oneself; generating categories, themes and patterns; coding; searching for alternative explanations; and writing the report.

The typologies generated or the classification schemes (Rossman and Rallis, 1998) were based on previous familiarization with the transcripts of the interviews. There were four areas determined as salient either for this report or future investigations. These areas of interest are as follows in order of importance to the investigator: How does change in rural agrarian communities occur? Factors influencing grassroots resistance to change? Evident backlashes to change, particularly as a result of rapid change; and traditional agricultural practices, ethnicity and religion as they affect social change. This paper focuses primarily on the first question, while the others come into play to a lesser extent.

These typologies have in many ways underlined the fact that the “legitimate charge of imposing a world of meaning on the participants that better reflects the observer’s world than the world under study” (Patton, 1990, p. 398) is a very real one. As such, this study, is a classic example of this, I interviewed with the idea of finding overarching significance and similarities between different regions of the world, and found them. In this way, I can justify my ideas with ‘fact’ and thus legitimatize my own work. In effect, the emergent insights have broadened my own previous understanding and misgivings on the subject of interest.
I was at first awe struck by the language implemented by the different individuals, their upbringings, education and social standing in their native contexts all had an effect on the way they interacted with the subject matter. Two were North American. They were open to different points of views, but they were also very much moved by the romanticized, almost spiritual quality of village life. Theirs was an etic perspective. The one interviewee who had an emic perspective, showed a deep appreciation for tradition and the elders in society, his was a sense of respect, of longing for better times, but also of practical necessities his people must involve themselves with in order to move forward and progress. Though, progress for him means emulating North America in many ways. The third interviewee was very different, though he could potentially have an emic perspective, his was an etic one, because he worked with under-privileged people, while he represented the government, and power. But his is a story of disillusionment with government and the systems in place. His view was tantamount to that of an oppressed person to an oppressor, he became a mover of people in his country and ended up incarcerated for several months for doing so. That incident has marked his life, ever since then he is sensitive to issues of oppression. The last interviewee had both the emic and etic perspective, though her training as a development worker and her experiences with international organizations seem to give her more of an etic view, even on her own people.

5. Coding

Coding was a long and tedious process given I wanted to become familiar with the data. I reviewed the transcripts several times very quickly, (10 to 15 min./interviewee) and left them while I worked on other projects, the next day I spent more time with each (20 to 30 min./interviewee) and again left it while working on other issues. Two days elapsed, before I was able to actually get to the transcripts and read them individually spending much more time on each one (40 to 50 min./interviewee). During this final reading I had a better sense of what the material was about and felt much more comfortable in choosing areas of particular interest and to flag. I used a 3 in. x 3 in. pink sticky paper pad that I cut into strips, so as to minimize paper
consumption, and used them to mark the chosen quotes or themes by placing them on the right hand side margin of the paper. Then, I wrote on the side of the pink slips that were visible from the outside of the frame of the page. I wrote in pencil but enumerated them according to the pagination of the transcripts, if more than one quote for page, I differentiated between them by using letters so as not to confuse them with the pagination already on the papers (Rossman, 1998c). Each interviewee had different color paginations on the pink slips of sticky paper; the colors were green for the 1st interview, black for the 2nd red for the 3rd, blue for the 4th and none for the fifth interview. The next step, mentioned earlier, was to place them on the dining room table in chronological order, from first to last page, done separately for each interviewee. Then came the fun part, determining typologies that were later instrumental in the development of this paper.

The participants’ insights were sought as specific examples in the case study method. Discussions such as personal transformations that modified the lives of the interviewees were evident in all five of the participants, I was interested in intertwining these as well as the means of transformation that took place in their experiences with agrarian communities. Essentially, the researcher looked for evidence of change that would transcend the limitation of nationality, ethnicity and faith.

6. Research Ethics

The ethical and political issues undertaken in this study have for the most part been secondary in importance to either the interviewees or the interviewer. The major reasons for this unique situation are: friendship, a sense of civic-mindedness and an underlying sense of mutual respect, and consideration. This view stems from the fact that the individuals interviewed were either not from North America or were U.S. citizens who lived and fell in love with other cultures and worldviews. While not being a U.S. citizen does not alienate the issue, it very soon became a non-issue. Reasons for this may be attributed to a heightened sense of awareness, courtesy, and sensitivity both from interviewer to interviewee and vise versa.

1 The fifth interview was helpful in laying a general understanding of processes of change in the Philippines, however, technical difficulties with the tape recorder meant the interview was not transcribable and thus, missed out on much valuable information.
Keeping in mind the political and ethical considerations that are associated with any sort of inquiry, these are important values needed in conducting any kind of competent professional work. Sadly, there tends to be less and less truly professional work going on in the world. This realization only increases the need to diffuse widely the ideals of ethics and fair play.

The checks and balances incorporated into this work include the use of the transcribed data, the observations, as well as my own perceptions on kinesics, proximics, and general mood (Rossman, 1998b). I espoused humility by not strutting my authoritativeness on the subject. At the start of the project, I was writing about the first interviewee, who read over the material about himself and his experiences as distilled through my own lens. This gesture was a positive one as he was pleased both with the outcome as well as the fact I shared it with him. As time progressed, however, his ability to get things done ahead of time in order for the various players to double check their work was more than I could do in view of the multiple other pressures acting upon me at the time.

7. Researcher’s Role and the Natural History of the Study

As an emerging researcher I needed to learn at an exponential rate in order to keep up with the process I had initiated. It was a fascinating role to be in, I did not see it as dramatically challenging or restrictive at least not within my limited and sheltered exposure to the inquiry methods. I found it challenging at one point after having interviewed Enrique and found that his view was completely overshadowed by his full-hearted commitment to the oppressed and their issues. It was not until much later that I realized that every single one of the people interviewed put forth in some way or another their own agenda, interest, or issues of most concern.

The initial area of interest changed little over time; it began with the idea of initiating 'a study of the dynamics of social change as transmitted or learned in rural agrarian societies in the tropics' (Genge, 1998). Over the course of a semester it expanded from the Tropics of Cancer and Capricorn at 23.5 degrees north and south of the equator to incorporate regions as far as 30 degrees north or south. This was done in an effort to include a larger selection of interviewees, given the pool of individuals
with experiences in the tropics who now reside in the Amherst, Massachusetts region is reduced. This was more of a practical modification, as the number of people that have some agricultural experience in the tropics is rather reduced at the Center for International Education (CIE). The CIE has many members who have lived in the tropics but few with agrarian experience, fewer still, those who are easily approachable and willing to give up some of their precious time. Another modification was the elimination of formal ‘observations,’ instead; these were replaced by an informal page long description on the circumstances of the interview, my own feelings and perceptions on the participant and a note of the day’s weather among other details.

D. Summary

This chapter began by providing a brief introduction to the study and the topic involved. It brought to the forefront the research design and methods, which included seven sub-topics as follows: data collection approach; population of interest, including both interviewees and the target population; the data gathering process including timing, location, and logistics; the process of data analysis based on the literature; the coding of findings in order to write the document; research ethics; and finally, my own role as researcher and the natural history of the study.
CHAPTER 2

SOCIAL CHANGE: A THEORETICAL GROUNDING

A. Introduction

This chapter explores some of the literature with the aim of better understanding the nature of social change relationships in different competency areas. The first task involves the exploration and understanding of the meaning of the concept itself. What is social change? Is there some means of understanding it or is it an elusive phenomenon that is unexplainable? The second involves grounding the theoretical frameworks so these can be used to interpret the interviews findings.

There are several important theoretical components I will go through in some detail (see Appendix A for further detail), these include Paulston’s (1977) theories of social change from an education perspective, divided into equilibrium theories and conflict theories. In addition, I review several other social change theories coming from various different professions. These include theories/models such as the dialectical approach (Dahrendorf, 1967; Paulston, 1977), the research, development and diffusion model (Havelock, 1971), the empirical/radical, the power/coercive, and the normative/re-educative models (CERI, 1973), induced innovation (Ruttan and Haymi, 1973), and structural change theories (Todaro, 1989), among others.

B. Theories and Social Change

The organizational strategies that were developed in the 1970’s with regards to social change have evolved at a slower pace in the past 30 years. Their proliferation at that time was a result of research on change that was conducted in the field of education. The social sciences were at the forefront of investigation at the time given educational change covered a wide range of concerns, from the socio-cultural, political, and economic environment into which an innovation was introduced, to the inner processes the user experiences in moving from one ideology or practice to another. Another reason was the vast government funded resources
available for research in the post-Sputnik era of the 1950s and 1960s was aimed to improve the North American educational system in response to advancements made by the Soviet Union. In effect, much of this research eventually made its way into other disciplines, particularly the social sciences. However, because of the nature of the data gathered, much of the literature in education with reference to change is particularly relevant to development and is worthy of examination (Graybill, 1995).

I will step back now and reflect on the notions of social change as a phenomenon that has puzzled philosophers since ancient times. Heraclitus, a ancient Greek philosopher, referred to the paradoxical nature of change saying, We step and we do not step into the same river twice; we are and we are not. The notion of the river always different from what was there previously and yet in many ways retaining its identity and its course over long periods of time, suggests continuity and permanence; a point that places further importance on Heraclitus’ well-known dictum "nothing endures but change." On the other side of the world, the Chinese philosopher Lao-tzu, also interested in the notion of change, understood that "turning back is how the way moves" (Lao-tzu, 1963, p. 101), meaning the Tao causes all things to go through a process of cyclical changes. What is weak develops into something strong, but when this process reaches its limit, the opposite process of decline sets in. Thus, in both the East and West, change seems to be an elusive and dialectical concept.

Third World development involves a major form of institutionalized change. Generally, it involves approximations towards ‘modernity,’ given it does not always work; it is advisable to examine the complex phenomenon of change in greater detail. Thereby exploring major theories of social change and development as well as renown models and strategies for introducing change will prove helpful in understanding and framing the analysis of the study. Change is grounded in some previous understanding or view of reality and how these desired ends should be reached. Social change theories this century can be arranged as belonging to one of two camps, according to Paulston (1977), equilibrium and conflict; the following is a synthesis of his findings on the subject.
1. Equilibrium Theories

Equilibrium theories are based on the notion that social change is a response to higher levels of progress and development in society. Thus, as societies become more ‘rational’ or ‘modern’ their necessities evolve, and consequently values, practices and institutions need to adjust to changes in order to meet the new demands placed upon them by new developments. This rationale suggests that change occurs in societies because the needs of modern, industrialized, and urbanized society cannot be sufficiently fulfilled by the existing social structures. Each aspect of society is considered to evolve as society develops, or to adapt as functional incompatibilities or dysfunctions arise (Ginsburg, et al., 1990). Paulston's typology of equilibrium theories includes several variants.

a. Evolutionary and Neo-evolutionary Theories

Evolutionary and Neo-evolutionary Theories are strongly influenced by Darwin’s biological evolution model, and defines change as progressing from lower to higher stages of development. The various aspects of society are seen as "integrative structures" that function to maintain both stability and change from "simple" or "primitive" forms to more complex "modern" forms in response to changes in other structures of society (Paulston, 1977, p. 376). Therefore, ‘modernization’ models of development are based on neo-evolutionary theory, stating that underdeveloped societies should follow change processes in social, technical, and educational areas that are modeled on industrialized or first world countries.

b. Structural-Functional Theory

Structural-Functional Theory is a 20th century version of evolutionary theory, but it differs from the latter, because it focuses on linked stages of growth in a social-economic and cultural development system, whereby societies can maintain a state of uniformity. While reciprocally, society depends on schools and religious institutions to continue the socialization process and insure the continuity of its culture and values. It conceives of society as complex and differentiated, but for the
most part balanced. Change for the structural-functionalist is external to the system and it involves accommodating or fitting into the system in place, as needed by the larger society (Paulston, 1977). Change, according to structural-functional theory, is adaptive rather than transformative.

c. Systems Theory

Systems Theory builds upon the contributions of biology, cybernetics, and communication theory in order to avoid the conceptual and explanatory limitations of structural-functional theory. From the systems perspective, the need for reform arises when the system malfunctions, and is implemented through innovative problem solving techniques within the existing system.

Another aspect of systems theory involves the equilibrium theories. Equilibrium theories suggest that societies develop along certain paths of modernization that have been traveled previously by developed countries and that sudden, rapid change promotes unbalances that generally lead to short term change (Simmons and Esping-Anderson, 1983). Radical change efforts in Bolivia and Russia and the new nation states of the former USSR are recent examples. In order for lasting change to hold it must adapt itself to the functional necessities of the society into which it is introduced rather than being radically imposed from the outside. Attacks on equilibrium theories have come from many authors including: Smith, Paulston, and Simmons and Esping-Anderson.

Smith (1973) postulates that equilibrium theories are unable to account for exogenous factors, and thus, cannot demonstrate relationships or show the mechanisms of historical transition, nor can they describe precisely how change takes place. Paulston (1977, pp. 384-385) sees equilibrium theories, as applied in developing nations, as ethnocentric since they have an underlying assumption that all countries should follow the same path to development as the West. In addition, Simmons and Esping-Anderson (1983) maintain that equilibrium theories cannot determine what constitutes a functional or dysfunctional reform, but rather, rely on the oversimplification that anything that works is functional while anything that fails must be dysfunctional. Such black and white distinctions lead to conflict
theories, which operate on different assumptions and arrive at different conclusions.

2. Conflict Theories

Conflict theories are a rejection of equilibrium theories and emphasize the inherent instability of social systems. These theories operate from the position that equilibrium theories are not capable of accounting for substantive changes, but only change that reinforces the status quo. As with equilibrium theories, there are also several schools of conflict theories.

a. Marxist and Neo-Marxist Theories

Marxist and Neo-Marxist Theories are the most commonly known. They focus on issues of power, exploitation, and contradictions as necessary explorations for change in society. In terms of the Marxist view, institutions in society such as education and religion are part of the ideological structures which the ruling class controls to maintain its grip on knowledge and thereby its privilege and cultural hegemony (Gramsci, 1971). In the Marxist tradition changes that occur in institutions or groups are the result of major structural changes in society as a whole. As such, only a socialist revolution that breaks down the ideological and structural changes in society and replace it with equality at the macro socio-economic and political levels, and are such ideological stances able to address the fundamental inequity of social institutions when abolished.

b. Cultural Revitalization or Social Movement Theory

Cultural Revitalization or Social Movement Theory focuses on deliberate, organized, and conscious efforts by members of a society to construct a more satisfying culture (based on their own in-group criteria), rather than on social classes, as in Marxist theory. Cultural revitalization efforts can be interpreted as attempts to innovate not merely discrete elements, but largely new cultural systems specifying new social norms and behavior. Such efforts are viewed as constantly recurring phenomenon, much like a collective culture-creating activity intended to bring about
social/cultural change at local and/or national levels. It requires mass adherence to a common ideology, and emphasizes the need for stress removal via collective change efforts.

c. Anarchistic or Utopian Theory

Anarchistic or Utopian Theory shares the Marxian goal of radical social change and also affirms the goal of cultural revival. In contrast to other conflict theories, the anarchistic or utopian theories rarely validate their call for reform with the findings and methods of social science, and in addition such theories are never put into practice. Though, they often start with a solid critical analysis of social, political, and economic reality, they “rather quickly wind up in a dream world” (Paulston, 1977, p. 390). Nonetheless, their analysis often opens up debates that bring to light policy and program implementation constraints that are otherwise overlooked (Selener, 1997).

Conflict theories explain the nature of social change where equilibrium theories fail. They view society as oppressive, and as such those without power are encouraged to unite to strive for structural change as a single entity. Conflict theorists are better able to explain social turmoil’s in terms of conflicting interests and address the conditions under which conflict and consensus prevail. They are realistic in their views given they examine the scope of conflict before assuming that general agreement prevails. In short, they address the important issue of power operative in all attempts to change the order of things (Simmons and Esping-Anderson, 1983). Conflict theory’s weaknesses include the fact that diagnostic power, though prevalent, are seldom useful in the practical day-to-day management of affairs in society and most sectors’ search for acceptable solutions and harmony, thus, the practical utility of conflict theories are unlikely (Dalin, 1978).

3. Other Theories

The classification that follows is more of a non-classification for a variety of theories and models of change used in several disciplines, including: education,
business, and development. The following are a mix of theories that address the concept of social change, either at an individual or societal level.

a. The Dialectical Approach

The Dialectical Approach was the result of a meaningful combination of equilibrium and conflict theories. This approach was pioneered by Dahrendorf (1967) who suggested that society may have two faces of equal reality: one of stability and harmony, and one of change and conflict, requiring both to be accounted for in any change effort. A decade later Paulston (1976, 1977), after analyzing the literature, maintained that both views are necessary to adequately explain change, and conversely, lack of change; one without the other results in dogmatism. While a union of the two is complicated given that changes focused on structure and product, probably would not result in the most needed changes, while process reforms that generate the most powerful opposition, are the most difficult to achieve (Graybill, 1995).

b. Research, Development and Diffusion Model (RD&D)

Research, Development and Diffusion Model (RD&D) developed by Haverlock (1971) focuses on the developer and the origins of innovation. It tends to be rationally sequenced in evolution and the application of a new scheme, and tends to require broad based planning over long periods of time. In addition, it requires division and coordination of labor that fit a rational sequencing and planning scheme, and assumes a more or less passive but rational client who will adopt an innovation if given it at the right time and in the right manner (Graybill, 1995). In addition to the RD&D models, Haverlock also developed two other models, which are mentioned briefly. The first is the Social Interaction Model, which focuses on the communicator and the wide diffusion of an innovation. It claims that the rate of diffusion through a social system follows a predictable S-curve (Havelock, 1971). The second, is the Problem Solving Model, this one revolves around the receiver and the dynamics of process. This model is typically based on the assumption that innovation is the solution part of a process that starts with adopter needs. Each of these three types of
models sheds light on one perspective of the innovation process and suggests approaches for bringing about change. However, most change models suffer from the fact that they are concerned with "knowledge utilization" (Dalin, 1978, p. 73); meaning that knowledge exists about better practices and the main challenge is to connect the recipient of change with more knowledge so that the change envisioned comes about.

Many different means of classifying change have evolved; the research next focuses on three classifications by Chin and Benne (1961) that have evolved for classifying strategies for change in human systems.

c. Empirical-Rational

The Empirical-Rational model is philosophically congruent with the RD&D model for change. It assumes people are guided by reason and that change is driven by the demonstration of a given innovation, which, once recognized and appreciated, would promote adoption. This model assumes that if the innovation were viewed as good and reasonable, people would naturally adopt it. Interestingly, it is this type of strategy that is the most commonly employed in change initiatives (CERI, 1973).

d. Power-Coercive Strategies

Power-Coercive Strategies are based on the exercise of power. Those with less power take change. The imposition of power from above alters the conditions within which other people act by limiting their alternatives or by shaping the consequences of their acts (Graybill, 1995).

e. Normative-Re-educative

Normative-Re-educative models fit well with problem solving models of change. The empirical rational strategies depend on power and information or new knowledge (i.e., power in potential). Information generally is received by people who do not know and as they acquire more knowledge it is assumed that changes will take place. In such a context, change, is a matter of activating forces within a system in order to alter it. Thus, the patterns of action and practice in a system are
supported by socio-cultural norms and by individuals' adherence to those norms. Socio-cultural norms, in turn, are based on attitudes and individual value systems, “normative outlooks which undergird their commitments. Change in a pattern of practice or action, according to this view, will occur only as the persons involved are brought to change their normative orientations to old patterns and develop commitments to new patterns” (Greybill, 1995, p. 64).

f. Induced Innovation Theory

Induced Innovation Theory is a general framework that fits into the neoclassical theory of institutional change and has been used on a wide basis for the study of economic development. Induced innovation sees change as based on cost and benefit maximizations and takes on the notion that those demanding change can exert political pressures for obtaining their needs.

This approach was drafted for the agricultural sector originally premised under the idea that institutional change is dependent on the enforcement of the costs involved. However, given the difficulties in determining such costs, the idea that institutional change will occur when the benefits are greater than the costs seams to lose its meaning particularly when enforcement costs depend on pre-existing culture, ideology, and social structure. Consequently, the key to innovation is in the pre-existing structure not in the changes of outlying economic variables (Ruttan and Hayami, 1973).

g. Structural Change

Structural Change promotes the notion that “development is an identifiable process of growth and change whose main features are similar in all countries” (Todaro, 1989, p. 77). Structural change models focus on mechanisms of transforming traditional subsistence agricultural societies into modern and urban ones. The tools it uses come from neoclassical 'price and resource allocation theory' and 'modern econometrics' for describing change. Fundamental to the notion, is the Lewis Two-Sector Model, a theory that was widely used to explain disparities of third world nations in the 1960’s and 1970’s. It was based on the idea of two very
defined sectors, the over populated rural sector, and the high productive urban sector. Not surprisingly, most of the development effort was focused on labor and growth of output and employment, especially in the urban sector. This is a sequential process through which the economic, industrial, and institutional structures of an underdeveloped economy are transformed over time to permit new industries to replace traditional agriculture as an engine of growth.

C. Overview

The models presented in brief provide a theoretical grounding on the direction and implication of change in different contexts and schools of thought. Though the theories have only been touched upon on the surface, they are quite specific in the scope of their particular interest. The basis these provide are important, however, in no place was I able to find literature grounded in the notion of change coming from within a society and from outside of itself. For the most part, the theories focus on external influences of change. This is not surprising given that most research on change is linked to ideas of ‘influencing’ the path of change within a population so as to result in some desired outcome. Such is the idea behind educational motivations of change, development, economics, and more recently pop-culture and the homogeneous commercialization of first world materialism to every corner of the globe. In fact, Lather (1991) speaks of the modernist assumption for limitless growth and power to change the world, a notion that has been mostly about pushing ourselves and others to the limits.

The question that arises is: were has all this lead? The socialization of major portions of the globe by the media, schools, tourism, etc. have effectively brought extremely pluralistic societies and cultures of disparate views to share common values and act in accordance to standards of right and wrong (Pizer and Travers, 1975). Thus, for the first time in the history of human kind there is an agreement that genocide or discrimination for ethnic, religious, cultural or whatever norms are not acceptable. However, these changes were originally stimulated by outside responses, in the case of the later, by international organizations such as the United Nations and Amnesty International, to name a couple. This is not to mention that these
organizations, as most others, have also been the catalysts of much of the disparities that today abound in developing nations, but they have contributed to the socialization of norms that are acceptable by very different groups.
A. Introduction

The present study has served as an exploration into the various models of change that societies find themselves going through. The interviews indicate two major areas of change, the first originating from within an individual or community, and the second, a much broader based and far-reaching form coming from outside the individual or community. The distinctions between inside and outside come from a general sense that one form of change is more locally/regionally based rather than inspired/instigated by outside forces.

This study has served to digest, contemplate, strengthen, and reinvigorate my own previous understanding of the processes of social change patterns that are common to tropical and subtropical agrarian communities. In addition, I gained an insight and appreciation for the participants in a way I had previously not been able to. This study was a means of grounding and formalizing the approaches inherent in the qualitative method. The case study findings served to understand small regional settings in depth and project these findings on a different level while finding commonalities that transcend region, nation or even continents. In addition, care was taken so as not to transplant or impose ideas to the point of creating a power-coercive model (CERI, 1973) [see Appendix A for more detail].

The question explored in the five interviews was large and general in its focus. During the first interview the question was formulated as follows: how does social change come about in rural agrarian societies? This, became the major theme for the interviews that followed. However, it was in those first few minutes of the initial interview that a definition came up, one that made perfect sense to me. My interviewee said, “It takes a long, long time, … [and] there’s two ways, anthropologists say. One is through innovation within a culture and the other is
learning from another culture” (Lucas, 1998, p. 4). This notion was key in exploring patterns of change in agrarian societies.

The remainder of this chapter is devoted to findings in both the interviews and the literature, to a lesser extent, in relation to an exploration of social change in tropical and sub-tropical rural agrarian societies and the views from inside community change advocates and outside a community change advocates.

**B. Findings**

1. **Change from Inside a Community**

Change from within is a phenomenon that was prevalent in years past, though it seems to rapidly diminishing its influence as even the most remote corners of the globe become accessible to the influences of the modern world. Despite the fact that traditional subsistence agricultural life styles are rapidly disappearing, the interviews were revealing in bringing to light individual experience(s) and beliefs. These are explored in more depth below.

Enrique, one of the interviewees, sums up the notion of change as emanating from inside when he says, "the most effective thing is you go over there and find development within their own environment. Don’t try to bring issues, don’t try to create dependence on our side, create something within the society" (Enrique, 1998, p. 15). Change in communities as with development should come from within a society, as they are most aware of their own needs and goals. A fact admitted by intervening parties is that even if they be technically superior, such a fact is irrelevant when the target population is not in agreement or regards it as not useful. The best solution is often to actively promote dialogue and participation by all parties involved and thereby “co-acting” rather than promoting a subject/action relationship (Rahnema, 1990). Change from within is just that, it is people from the community working for themselves and/or their communities' improvement.
2. Experience

Change from inside that is based on experience can come from several areas, the researcher divided them according to interview findings and came up with three categories; trial and error, observation, and modifications on old systems.

a. Trial and Error

Trial and Error is the notion of doing and learning from ones mistakes, often these can be passed from one generation to the other, as with one of the interviewees who spoke about pest control strategies, who said, "my mother used to do it, my mother learned from her parents and I learned from her, so this is how we learned" (Arturo, 1998, p. 3). Learning occurs by doing, "you ask questions working with them [parents]; things such as why do you irrigate the plant?" (Arturo, 1998, p. 4). And the learner receives the answer then and there. It makes sense because it is related to the individual's survival, in addition, to the possibly tender and nurturing environment that could potentially be fostered in a family farm setting. Another important fact, is that living in a rural agrarian setting means that an individual is completely reliant on the land and what the family can produce, thus learning by doing takes on a whole new character, and Arturo sums it up nicely saying:

...and this is how I learned, you know, how I make what is the medicines use, how you have to take, you know, how you can make use of it, all these sort of things. These were all related with the farm and my life, even the cooking food, you know. How the plant use food, you know, what is good for them and what is good for us and why if you eat differently, you know. Why it grows so fast, and grows so slowly. They die slowly and why they are alive, all this, you learn a lot! (Arturo, 1998, p. 4)

b. Observation

Observation “has always been in all cultures, the main foundation for learning and action” (Rahnema, 1990, p. 217). Observation is the ability to be open to every manifestation of reality in and around us. It is a selfless and compassionate act of taking in what is, and thus, coming to new heights of understanding of what may have previously been something simple and unimportant. Enrique recounts his story of
transformative observation when he worked as an agronomist and extension worker in central Sudan.

I worked as an environmental destructor, a weapon for the government, completely. I was part of the government, these stupid ideas from land protection which is completely dependent on chemicals and there is no harm in the environment. So it was a lot of chemicals and I completely changed my attitudes to be a pro-environment supporter. I changed because I found it was wrong, definitely, and it was a kind of personal experience [he was assigned to control a pest bird, sprayed against it and to his dismay] killed everything with life in that environment, snakes, wolves, beautiful kind of storks, a lot of wildlife was dead in the forest. It was a very painful experience for me (Enrique, 1998, p. 1).

Development and agricultural improvement schemes, the world over, tend to be glazed with a tinted lens that sees only through a one-way looking glass. An organization started in the Peruvian highlands, PRATEC, has been instrumental in seeing beyond the one-way looking glass of modern science and development. Instead PRATEC realized that as long as the lens was a western modernist one, peasant agricultural systems would always fail in comparison to the efficiency and grandeur of western agriculture. Instead, they focused on looking at native practices on their own terms and saw that culture and agriculture are inseparable. Thus, rituals, festivals, ways of organizing labor and kin groups and much more, all lead to the nurturing and tender caring of their world, in a symbiotic relationship where both the natural and cultural world intertwine and help each other (Apffel-Marglin & Addelson, 1998, p. 15). This same kind of non-western lens view is observable in Africa were both culture and institutions are fluid, dynamic, and ambiguous (Berry, 1993).

c. Modifications

Modifications are ever present in human societies. People apply new techniques, approach old problems in new ways, and finally make modifications on old systems. In Madagascar, a local farmer in the southern semi arid region had the possibility of planting trees in his fields as a means of providing shade, wind breaks,
and compost as well as raising the water table for smaller plants to reach. The concept that trees were good for their crops stuck with local farmers but notions of how to do so were modified to their needs. So "what they did was, ok. we'll plant trees but we'll plant trees on the border of the field; because the border of the field might be less productive, and [their getting] half of the neighbors property...and trees served as ...demarcating the field" (Miguel, 1998, p. 8).

Modifications are generally changes that are made in order to improve or make better, thus, taking the labor out of composting is a native spin on a western view of a way of doing it. Composting, Miguel argues, is always adaptable by farmers because "farmers would never do it the way westerners would show them to do it, its to labor intensive, its silly, you know. They have their own compost behind the house where they just threw their stuff anyway in a pit, it becomes compost and several months later they spread it in the field" (Miguel, 1998, p. 10).

Modifications have so far been represented as a positive step taken by native people in adapting some technique or as Miguel says, "they are taking the things that are useful to them, and making it work" (Miguel, 1998, p. 11). However, there is also reason to believe that peasants may be adaptable and innovative though they do not progress and often times regress and increment their underdevelopment (Griffin, 1974). Though, this is a dated argument and rather ethnocentric in scope it does raise an interesting question; are peasants able to go from a defensive to an offensive track and thus reach higher levels of productivity, income, and accumulation? Or is this just another aberration of the westerners view of agrarian people judged under western cannons of prosperity. Griffin based his argument on a historical argument; however, he must have overseen the history of the Incas in the Andes of South America and the legacy they implanted. The descendants of the Incas very quickly adopted the plow from the Spaniards as this was a continuation of a centuries long tradition, "because when they [the Incas] went in [to a newly conquered area] they would survey what's there and then try to optimize what was going to come out of there. So adopting a plow would be pretty natural if that is optimizing things" (Lucas, 1998, p. 6). Thus, modifications are prevalent among rural agrarian societies but can be seen as either progressive or regressive depending on the observer's point of view.
3. Beliefs

Rahnema (1990) looks at the individual in this day and age as having become so dependent on personalized knowledge systems with their certainties, that individuals have lost their capacity to learn, and for different reasons individuals are not able to look at the world and themselves free of fears, habits, predefined opinions, and judgements. The days of old and forgotten ways of acting out of sensitive attention to facts rather than under the senseless tyranny of daily pressures, seems a waste of time and energy! (Rahnema, 1990, p. 212). On the other hand, the author is adamant that change, real change, is generated from within, but then says change is “too serious a matter to be left in everybody’s hand” (Rahnema, 1990, p. 216). However, traditional agrarian societies are generally culturally wise, strongly conservative, and generally take long periods of time to assimilate new ideas; why so? Increased productivity, the modernist view of progress in the field, is not necessarily attractive to change, there must be a need that existing practices cannot meet (Dixon, 1990). Thus, the underlying beliefs of conservatism, traditionalism, or possibly distrust of foreigners are deeply ingrained and often hard to change. However, learning takes place when the learner wants to learn. It is a very individual process that occurs when the person feels the need to do so and is encouraged to continue when satisfactions are experienced with the results (Leagans and Loomis, 1971).

a. Principles and Convictions

These are harder to define than concrete experiences and data collection harder to gather. Nonetheless, Arturo makes reference to his father and his high moral principles and convictions. As a Brahman, a person from a high cast in Nepal, he was not allowed to drink of a Muslims water vase, but "like my father, he, like the Brahman cast, should not be drinking anybody’s water, but if he goes into a Muslims house, he needs to drink water, so he was kicked out [of the cast], he was kicked out many times. So I became part of the community even though I was Brahman" (Arturo, 1998, p. 15). This conviction of solidarity with the community was consistent with his character, as he was an activist and often ended up in jail for it. His principles were strongly evident at his daughters wedding and the issues of dowry. "My father was very radical, you see,
she didn’t do it. The whole community was encouraged not to do it, so nobody gave it" (Arturo, 1998, p. 15). In terms of agriculture, as a Brahman, he was not allowed to plow land, and Arturo’s father did, and for doing so was thrown out of the cast. However, Lucas mentioned on a separate occasion that many Brahmans farm, especially in the lowland regions were they displaced the native people, and financially make it. In Arturo's father's case, there seamed to be a genuine component of wanting to be part of a community, rather than exploiting them.

In a political vein similar to that taken up by Arturo’s father, Enrique struggled to maintain his environmentalist perspective even when going against the odds of a national bureaucracy. "I had to go through, you know, a lot of clashes to put my views … they arrest me for 4 months and then I can not leave the country" (Enrique, 1998, p. 2). Today he is still a strong advocate of change for the preservation of natural habitat. It is of interest to note that findings in community psychology research applications indicate that “there are three types of events that could arguably provide transmuting opportunities: traumatic personal experiences, religious conversions, and therapeutic interventions” (Piedmont, 1998). The researcher was interested in the parallels that exist between the experiences that Enrique had while in prison and those of a traumatic personal experiences as those had during a war, however, there are no data to suggest any meaningful linkages, other than the intuitive notion that extraversion and agreeableness make strong statements about the kinds of shifts in interpersonal style.

4. Change from Outside a Community

Much of the research conducted on processes of change in various fields has focused on change as influenced from outside of the group receiving the influence. Change in Structural-functional theory is viewed as incremental and adaptive, restoring balance to a system that has run out of order. Thus suggesting, change is external to the system (Selener, 1997). Sally Habana-Hafner (1998) represented several levels of community intervention that are taking place in decreasing circles of influence. Such influence, she acknowledges stems from international, national, or even regional levels that extend their influence at a local and community level. At this point, the community has a much stronger say and influence on organizations within it than any
national or international organization that is not somehow linked locally. Following the same line of reasoning, organizations have a say over groups affiliated to or working with them, and in turn individuals can influence the group. This view is not surprising and is indicative of circles of influence in terms of change patterns. In addition, Havana-Hafner takes it a step further and suggests there is never a one-way flow of influence. Instead, she argues there is a two-way conduit that may begin at the individual level and moves on up through to international levels. Thus, interpersonal, inter-group, inter-organization, collaborative efforts between communities, districts or states, and even nations are all possibilities of circles of influence and change.

Hoff (1998) adds the idea that development practitioners already recognize the challenges of action in the decades ahead and refers to the need for integration and harmonization of cultural, economic, political, and environmental factors in the field of development. On the other hand, one of the interviewees sees the process of change, as solely external and not really having any two-way exchange. He stated, "people need to be proven to them, then shown...that it [the issue in the process of change] could be done, and then they start to get interested" (Lucas, 1998, p. 15), so it's a processes of assimilation not really modification and therefore looses the quality of exchange, unless there are very specific circumstances.

This form of one-sided infusion of knowledge to “the needy” results in a power surge, much like adrenaline taking over the body and seemingly transforming it with capacities that only moments before were unthinkable of achieving. In like manner, institutions, organizations, and individuals all are affected by the development discourse itself, its structural arrangement is such that those providing help are boosted into unprecedented heights and those receiving them are abased to the core. Thus, the discourse itself has produced an infinite array of practices by which new mechanisms of control in the guise of power and knowledge have disseminated the world over in efforts to promote equity (Escobar, 1984). Nothing but the contrary has occurred for there is no more equity in the so-called developed nations than in the developing ones. Moris (1981) couches the argument of the ineffectiveness of development as human and organizational problems that are approached with inappropriate theoretical models of organization.
5. Environmental Factors

Environmental factors have traditionally had tremendous impacts on agrarian societies, because agriculture in its traditional sense is so dependent on nature. In many ways it is not surprising that change patterns seem to indicate similar patterns in various continents, not because cultural norms are alike, but because rural agrarian peasants the world over, regardless of where they live are dependent on larger phenomenon than themselves, and take on certain recognizable patterns of behavior.

a. Climate Change

Climate Change can be extreme in places, as it is in the Sahel region of central Africa. In Sudan, where civil war has been an ongoing occurrence since independence in 1956, desert encroachment has exacerbated living conditions especially for semi-nomadic people in the southern region of the country. Thus, "ethnic conflicts [have resulted in people] fighting on grazing lands...especially with desert encroachment is 4 km. per year... So every year a number of tribes moves everything...and start fighting [the fighting results are even worse, more] people who loose even their land, everything" (Enrique, 1998, p. 11). The results are devastating, because nomadic and agrarian life styles are ruptured and in its stead there is no more option than to go to the mayor cities and live in the slums from whatever can be obtained. Conditions have not improved, National Public Radio had a mini report on Sudan in mid January, 1999 bringing attention to the fact that war in the south continues and food and medical aid are very much needed. Problems increase once the ground dries after the rains, when the “Mora Halin” Arab militia on horse back come in and devastate the ethnically African southern Sudanese (Glass, 1999).

Mali, in western Africa suffers from the same climactic conditions prevalent in Sudan. Miguel spoke of his experience there as, the "weather is too unpredictable, increasingly unpredictable. In [the] past, for example, in the colonial era you’d have vast plantations of cashew nuts ...but all that is changing because the environment is changing" (Miguel, 1998, p. 13).
b. Harsh Conditions

Climate patterns are changing, often times more violent and dangerously than in decades past, but there are also more people and better means of communication, as a result it is much easier to find out about disasters with greater ease and efficiency. One author suggests that while the number and severity of natural disasters is increasing, it's not the weather patterns that are changing but rather that more and more people are exposed to them (Timberlake, 1988). In describing to an interviewee an example of the effects of climate change on a community, the following is the account of Londrina, a British planned city for coffee growing in Brazil, located right on the tropic of Capricorn.

One year, 30 years ago, I think, very strong cold winds came up and destroyed the whole crop [coffee] and that was enough to change the mentality of the people, and people started growing other things, other than coffee, coffee started spiraling downward after that. Now they grow rice, they grow, wheat, they grow you name it, they grow it, among other things they also grow coffee but its not the major export by any means. But the turning point was the weather in this new area (Genge, 1998a, p. 12).

Harsh conditions mold societies to adapt to its folds. In Tunisia, were the Mediterranean climate quickly becomes deserted and dry, live the Berber, a strong-willed and deeply traditionalistic people that can date their origins back to pre-Roman times. They have been agrarian people for thousands of years, but "one of the important things to understand is because the environment is so harsh, there seems to be an attitude of taking advantage of what is available now… because if next years conditions are extremely harsh you’ll have no crop" (Lucas, 1998, pp. 11-12).

6. Economic

As with the example in Londrina, Brazil, economic downturns are commonplace and seem to be so increasingly as the globalization of the world becomes a practical reality. Economic upheavals that marked the way societies functioned occur at different levels of impact, one that has been remembered over the years for its scope was the
great depression of 1929. However, the exploration on the subject will not look at this event, instead it is focused on third world events, and in particular at a local level.

a. Consumer Economies

Consumer Economies are based on the notion that consumption promotes growth, which in turn promotes better standards of living, which, if logically taken a step further brings happiness and wellbeing to those who partake in such a venture. On the other hand, there are traditional economies based, in an idealized sense, on barter and trade that can be attributed as “pre-capitalist,” and therefore having little of value for incorporation into the world economy. Such economies producing for direct consumption by the farm households and the immediate community are very similar to pre-industrial Europe (Dixon, 1990). Inherent to this form of governance is the notion of mutual help and cooperation because of economies tend to be of subsistence levels and thus can not get very far ahead, without help.

In Madagascar, rather than climatic conditions for social change patterns, they were economic. "Because the world economy for coffee …fell in the 80’s … a lot of eastern Madagascar was deforested for coffee production by the French, and now since the price has fallen people start abandoning their fields and going to other things. [The same sort of thing happened in West Africa]. It wasn’t so much a natural phenomenon, but again world prices …fell and in a sense it’s environmental factors, because…it’s not an ideal place for production" (Miguel, 1998, p. 12). In Senegal, West Africa, peanuts were introduced by the French colonialists and forced farmers to grow them for cooking oil. After world war two, the demand for oil increase to the point that over half of Senegal’s arable land was in peanuts, a highly nutrient depleting plant and one that leads to great erosion because the plant must be completely uprooted for harvest, thus, exposing bare soil to the elements. As long as the market provided, peasants were compelled to join the lucrative business, but the low return on peanuts in the 1980’s produced a huge migration to the cities. Today, Senegal has overly extended droughts, which have lead to widespread famine, however, these changes were not caused by the drought, they were exacerbated by it, but the drought comes from too many years of over cultivation for the sake of making a buck (Maryknoll, 1984).
Yemen, on the Arabian Peninsula, is a developing agrarian nation, until recent years it was the mayor producer of mocha coffee, a country full of mountainous terrain and greenery everywhere. Market demands for mocha coffee decreased and in its place “gatt,” a kind of amphetamine an illegal crop in most countries except Yemen. Enrique sighs with grief saying, "before...it’s been only for vegetables and coffee, mocha, mocha coffee, this came from Yemen ...so they replace it because people chew gatt all day and it’s a cash crop, you know, people become completely dependent on their gatt" (Enrique, 1998, p. 19) and then they are able to export it to international underground markets.

**b. Materialism**

"People are doing an incredible amount of work to modernize, so change is just inevitable...so forget about traditions" (Lucas, 1998, p. 22). This unfortunately is the pattern of change that seems to be enveloping the world, materialism is pervasive, one person has one thing and shows it around, and automatically others want it. In Nepal, feast had traditionally been a simple deal, but with the arrival of the more affluent Indians, things changed very fast. For example, "they had other things, you know, the feast, [they had] more fancy way[s], they have the radios, so our whole community was shifting from a more traditional to a more modern pattern" (Arturo, 1998, p. 16). Materialism also causes other setbacks in traditional societies. Materialism tears at the very thread of community life, as it slowly unravels cultural norms and standards. "What you see these days, you know, the people are drunk. They have distilleries there [in the community he grew up] and then they work and come back and beat their wife. Before, drinking alcohol was [not a problem]. I remember that until I was 16, I never saw people drinking alcohol" (Arturo, 1998, p. 17). Changes that stem from modernization for the purpose of material aggrandizement, generally lead to the adoption of "new technologies and innovations they [meaning those being changed] don’t have checks and balances, so you may get the worst of something, the worst comes unchecked" (Lucas, 1998, p. 18). Our ‘global village’ is getting to look much alike, materialistic ideals have spread the world over and imbued the way people dress and look, tend their sick, educated their children, and even to the way they construct the

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buildings they live in (Harrison, 1993). The major influence in this colonization of the world is the pervasive power of the media, in all its forms, to permeate societies around the world with Eurocentric constructs of reality. Not surprisingly, who holds the control reigns of this influence and who reaps the benefits; the ‘developed nations on earth’ (Escobar, 1984).

c. Power Symbol

Many are enraptured by the notion of power. The notion of, I am better than you for x or y reason is very widespread. This kind of reasoning is destructive to the social fabric of a community. Modernism, and along with it, materialism, has generated ideas once held unthinkable. In Sudan, as it could be in any place on earth, a "kind of power symbol [has a lasting impact on a small community when, for example one person] has a car in front of his house, has this and this [the car] gives a kind of bad example to the people [and other neighbors] they try to imitate him, they try to find ways to get rich, [so then there are massive crop management changes] from vegetables to cash crops" (Enrique, 1998, p. 19). The problem stems from seeking power so as to be better off than the other. This view results in a flagrant disregard for cooperation and traditional collective efforts, and result in the destruction of the larger community. As more people in a community buy into the idea that cash crops are the way to go, less is produced for local consumption and thus begins a cycle of greater reliance from the outside in order to supplement their own sustenance. Compounding the issue further is the fact that many farmers in a community or region produce similar cash crops, due in part to the climatic limitations of the area, the consequences of such actions, however, are devastating and result in a market depression because of over supply, and a situation is created were poverty abounds and power is devoid.

In this sense, people from the center of economic and political activity are emissaries that to the rural agriculturist represent power; as such, the person of power has the ultimate word and must be agreed with. This was the situation one of my interviewees mentioned. He said, "Ok, number one, power, this person is representing power. He is coming from the center… from the side of the oppressor, so I think power is the issue" (Enrique, 1998, p. 15). The fact that the oppressed want to become like the
oppressor is a form of taking on the oppressors' values. This response to the symbolism of power is not uncommon and is typical of 'naïve stages of consciousness' where the oppressed blame themselves for their problems and overtly model the oppressor's ways (Smith, 1976).

The psychological scars imposed on the developing world stem in part from the arrogance, imposition, and power dynamics that were born from colonialism. Colonialism is an experience in racial humiliation Harrison quotes Fanon as saying "to the degree that the white man imposes discrimination on me, makes me a colonized native, robs me of all worth, all individuality ... Then I will quite simply try to make myself white: that is, I will compel the white man to acknowledge that I am human" (Harrison, 1993, p. 50). This complex has stayed on in the psyche of third world peoples and remains an indelible scar in western history.

d. Exodus

Reasons for leaving a rural village are numerous, thus far, a few have been mentioned; weather related devastations, economic free-fall, war and displacement among others can all have an effect on migration and resettlement. The ramifications of such events are enormous - mass unemployment, lack of sanitation, health, education and saddle a loss of hope - and can result in a whole undercurrent social class that is exemplified by the favela dwellers of the world's large cities. In Lesotho, "when the people leave the village, it upsets [the] kind of village social structures, [and] you have a whole generation of young people, basically young men that at least aren't there and thus aren't learning [any] traditional knowledge" (Miguel, 1998, p. 14). Village level exodus often results in loss of traditional cultural values and norms, especially when whole sectors of a village go off as they did in Lesotho to work in South African diamond mines. In this particular situation it did, however, have some interesting ramifications. "There were women going to the university assuming high positions of wealth in government and even back in the villages...the first woman chief I ever met was in Lesotho... women likewise, were really well respected" (Miguel, 1998, p. 15). However, this is the exemption rather than the rule in most developing nations.
Change is a constant factor, particularly in rural agrarian communities, though the stimulus often comes from outside the village and tends to lower the standard of living for large sectors of the population. Reasons include sharp demographic increases on a finite land base, manufacturing industry destroying local artisans markets, or plummeting prices for agricultural products. When such pressures arise peasants respond in a variety of ways; of which migration is one option (Griffin, 1974). Potter describes a similar migration trend in China to that in Lesotho, when he says “the spontaneous and voluntary migration of peasants to urban centers, where they seek jobs and material comforts of the city, is perhaps the most important mechanism of change” (Potter et al., 1967, p. 407). He sees the temporary migration of males as the norm, his views, though a bit dated, are still valid in many areas of the world.

7. Government Policy

Government policy has had tremendous impacts on the restructuring of rural peoples lives all around the world. Changes have been positive in some cases, though there is a general trend to disregard the lowest classes in society. Government policy can play a crucial role in mitigating or heightening conflicts through their influence in areas such as agriculture, education, demographics, and development to name a few. This section briefly looks at several policy areas including: agriculture, education, governmental dependency, demographics, development agencies, and demonstrations of agricultural methods and techniques.

a. Agriculture

Agricultural policies can be either making or breaking peasant populations in rural sectors, as evidenced from the following interview accounts. Policies in Tunisia were such that "it was isolated, [and therefore had] little imports and most is exports. Which means prices for bringing things in are high" (Lucas, 1998, p. 24). This was done in the early 1980’s as a means of protecting emerging local industries. In agriculture it improved and stimulated growth and production of otherwise foreign run farms. It did wonders for the honey market in country. Lucas again recounts, "honey
prices [were] exceedingly high (US$ 4.00/liter)… much more expensive than the US, but if their allowed to import honey, [they would] get all this cheap stuff that [would] drop the price and there was a lot of concern to keep them up and keep incentives for local production" (p. 24). In this case, government incentives were directed at trying to improve the national economy with the added benefit of enriching the rural agrarian farmer. This, however, is not always the case, as with Sudan, a country similar to Tunisia in that it is African and of Muslim heritage, although one had French colonialism and the other British. The Sudanese government sought to increase revenues by promoting a system of awards to those who participated in the government-sponsored projects, as long as the bidding was for cotton or some other nationally approved export crop, the awards would provide larger credit ceilings on bank loans for equipment, seed, and labor. Those who did not comply were urged to do so by the payment of taxes, not in kind, but in cash. This kind of policy structure quickly eliminates local subsistence agriculture in favor of cash crops that then lead to the same scenario outlined in the previous section. This process is “one of the principal contributory factors to the break-down of tribal life and its resulting social problems has been the tendency of governments to draw the younger men from the land by obliging them to earn money for taxes elsewhere than on their native soil” (Ruopp, 1953, p. 88).

b. Education

Is a tool of socialization that is most often driven by government policy. In Nepal, education had no national standards until the early 1980’s when the national system was established. Until then, schools were run locally and had their own mandate, agenda, and budget. One of the outcomes of this early system was that people gathered to discuss school and community issues, and there was greater sharing and dialogue than has ever occurred since. The centralized educational system that was financed, masterminded, and initially run by USAID, built in to the system several unrealized long-term costs at the outset of the project. "USAID said, ah! you should not worry about the community...[because they will all be the same in a centralized system with] Katmandu as the center [this, in turn barred] the community, you know, because
the government started putting their own teachers and control examinations...[and] you had to write in the national language [Nepali]" (Arturo, 1998, p. 10).

A decade later the funding for centralized education was over and with few prospects for renewal. In the meantime, community participation, so important to pre-school reform days were lost, and the central government pressured communities to take up 50 percent of the school costs. Again Arturo recounts, "the community lost their control and there is no interest in them, [i.e., the schools] now they are not paying, they are being obliged to do something that should be the governments responsibility, [and] for the first time, in peaceful Nepal, there are strikes and demonstrations" (p. 10).

c. Governmental Dependency

Dependency on government implies a measure of defeat in Nepal. For example, communities were in charge of their infrastructure, education, and medical services. While these services were minimal given the cost factors involved, they were empowered with the knowledge they were capable of leading their own destinies. When centralization took over, "you see, everybody looks at the government, you know, to do all those [services to the community]...One decade ago they can do by themselves, now everybody looks at the government. [Yet] what [is] the government [actually] doing? ...[in the mean time, local residents] are very dependent on the government, you know. They lend you, so they lend you everything...and people expect it!" (Arturo, 1998, p. 22). In as much as traditional knowledge and checks and balances are lost, so too are future generations lost. The cycles of dependency that are often established by governments, are in many ways structured attempts to co-opt and integrate into their folds dissident elements of society. Governments often take the "corporativist-authoritarian" development strategies, and common patterns in Latin America, have followed a "segmentary incorporation" model, where substantial state aid goes to the most organized groups within an emerging social sector (Collier, 1976).

The dependency cycle pattern involves some level of fear of government given the pressure it can exert on individuals and societies, so that they comply with the will of the power holder. For example, "the government comes from the center and starts to confiscate the land. They said, ok. all this land is ours ( is the governments), and then
they start putting their policies, you know, we want this area to produce groundnuts and this for sorghum" (Enrique, 1998, p. 11). What happened to the people that lived and worked on the land? They were forced out, in the face of few options; many migrated to city peripheries or worked for the government on what used to be their land. In southern Sudan, they are faced by other difficulties including, government sponsored persecutions, drought, famine, and anarchy in the rural areas; all exacerbated by government policies.

In the Philippines, the government leases ‘fiscal’ land to multinational corporations as a means of generating quick revenue. What they did not take into consideration was the fact that much of the country is populated and cultivated by rural agrarian peasants. Marcela (1999) was helpful in confirming reports from other sources, and mentioning some of the roles that governmental policies have had on rural people. When peasants resist government-sponsored orders of expulsion from the land, it resorts to strong measures. One farmer recounts his story as follows:

I sold my land because they asked me to, and I really had no choice, because if I didn’t sell it they would keep on coming back to me until I finally gave in and sold to the company. Now, if a farmer won’t sell, they get armed men to try to frighten him off. The farmers left because of fear, because if they didn’t sell their land, their lives would be taken (Maryknoll, 1984).

**d. Demographics**

The demographics of change, in terms of influxes of people into or out of an area, and the effects this has on a culture can have lasting impacts. Population pressures have risen, and in many countries doubled in the last three decades. The pressures, this fact alone exerts, on the land is enormous, take for example a small country like Puerto Rico whose population is close to 4 million people, land pressures are such that people start farming in areas that should never have been touched; the consequences are devastating, life threatening landslides, property loss, and market depressions. Lucas

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23 The DelMonte Corporation displaced hundreds of subsistence farmers when it established a for-export pineapple plantation in the Philippines. In this country alone, 3 out of 4 children are malnourished and yet over half of all food produced is exported! (Maryknoll Brothers documentary film, 1984)
recounts his experience in Puerto Rico, saying "it was fascinating, because people were planting on hillsides, very steep hillsides with very deep oxisol soil [oxisols are very eroded and nutrient poor soil]...it rains a lot so there’s a lot of erosion, [so farmers would plant to the contour and use terracing techniques, but heavy downpours] would build up and then collapse and...landslide[s][were common]" (Lucas, 1998, p. 6).

Population pressures on limited arable land in Tunisia resulted with some people having no more than "three acres [and given the harsh climate it could not all be planted at one time, some of it had to lie in fallow] and only planting 1½ acres" (Lucas, 1998, p. 8). This was not uncommon; others had nothing, no land whatsoever. Many writers see population growth as one of the key reasons for intensification of existing methods of cultivation, as well as, the transition to new more intensive systems. Such moves need not be in the areas of agriculture, in fact there is substantial growth of non-agricultural activities, such as handicraft production and trading, though these have historically reflected the ability of the agricultural sector to support such activity (Dixon, 1990).

e. Development Agencies

Development agencies have structured themselves so as to be indispensable at all times. It is a structural design that empowers the agency rather than those they are working with to help advance socio-economically. Agency members are often the problem finders, and then bestowed upon themselves the grace of proposing the solutions to the problems found; the “experts” by all accounts. In addition, the people being served are lead to believe that they do not have the capacity or the material resources to deal with their own problems; they were lead through a series of activities that determine a future planed for them by the “experts.” The interveners, as a rule, think they have a response to the problem(s) of the intervened: “some of us because we have no doubt as to the efficiency of our professional competence; some more humble and participatory, because we assume that, through PAR or other methodologies initiated by us, we will either find the answers or ultimately convince the other that ours is right” (Rahnema, 1990, p. 213).
The strategies envisioned by development agencies are as numerous as there are agencies for development. Leagans and Loomis (1971) saw the process of agricultural modernization, (i.e. change) they seem to be interchangeable in terms of agricultural practices- as dynamic and advancing as are science and technology. They saw three promising alternatives to agrarian development, one, creating a macroenvironment that encourages and makes possible that the farmer modify farming patterns; two, developing a body of useful technology and production imputes; and three, optimizing an extension education system that links current behavior in ways that stimulate innovation and overcome achievement disparities. However, such a system, though, dated has been common and continues to be so in much of the developing world, and the general underpinnings are still based on the notion of the foreign expert and the poor and incapable rural peasant; such stigma needs to be expunged from the development rhetoric and practice in order for it to have any meaningful and lasting impact.

f. Demonstrations of Agricultural Methods/Techniques

The classic means of getting people to do something of interest in promoting is to show it off, make it look good and see what happens. In Madagascar while working with the World Wildlife Fund, one of Miguel’s tasks was to "throw ideas out there and see if people kind of bite on them (Miguel, 1998, p. 2). It was based on the idea of working with lead farmers and if other people saw it, they would do something, you know, with relative success, they would adopt it or they would continue that pattern" (p. 5). This system worked well, because often times the farmers who could use the most help, in the westerners eyes, is often the poorest and least able to take on risks. Thus, by having lead farmers, generally local people who are a bit better off, as well as, capable and willing to take up some risks; other farmers can see the results and later take action as well. In Tunisia, "demonstration, was the biggest thing, and talking with people and working one-on-one for a long period of time, two years" (Lucas, 1998, p. 14) is what worked best. In Tunisian Barber culture, failure is looked upon with such scorn that essentially no one would take a first step towards change. "Because socially if they took a risk and failed, they were fools, and would be laughed at by the rest of
the community, and that was the worst thing that could happen to them, because of peoples relationship with each other and regard for each other, the social standing was more important than anything else" (p. 14).

It is interesting to note that PRATEC, the institution in Peru that is attempting to de-westernize knowledge has looked at the relationship between transmitter of knowledge (i.e., western knowledge) and the receiver of knowledge (i.e., the peasant). Findings suggest that, while repeated efforts were made to develop better methods of conveying western knowledge to agrarian farmers, it was impossible to approximate peasant reality and thus, make development relevant to their lives. Does this, then, suggest that there needs to be another system of development?

C. Conclusion

What is social change in tropical rural agrarian societies? The interview explorations were revealing on several aspects of tropical rural agrarian societies and their means of adapting and adjusting to new circumstances and pressures. The exploration was instrumental in determining two general paths to development, one originating from within a community and the other from outside it. Inside patterns of change were generally individually fostered and promoted first, on an experiential level, meaning practical hands-on, and comprises trial and error, observation, and modifications to systems as a means of change. It also includes the inner, or spiritual components to change, such as principles and convictions that drive a persons moral conscience to act in certain ways.

The influence from outside on change patterns in a community were environmental, economic and policy driven. In all cases the individual is at different levels of lack of self worth, as the very system is against providing to the downtrodden. In environmental influences, change was driven by elements such as climatic conditions, and harshness of the weather. Economic impacts are wide sweeping and numerous, and determined as money market, materialism, power symbol, and exodus from the peripheries to the centers. Policy was placed as governmental, be it national or international, and the tentacles it has in the areas of
agriculture, education, government dependency, demographics, development agencies and demonstrations of agricultural methods/techniques.

These have been the exploration into change and its impacts, now the questions remain, is development and the changes it has brought about in developing countries around the world coming to naught? Or is there hope for the next millennium?
CHAPTER 4

FINDINGS AND IMPLICATIONS

A. Introduction

This chapter is devoted to the findings and implications that have emanated from the previous discussions on social change.

B. Findings

Chapters two and three are the mayor sources of data within this document; they portray a deeply defined line that differentiates those changes emanating from within and those from outside a community. The general perception that change from within is driven by emotionally and ethically grounded ideals, is true to an extent. Though this perception places a blind eye on the practical groundwork that allows for the emotions and ethics of decision-making, and finally for change to occur. On the other hand, the perception that change from outside is solely powered through money, production, time lines, and adherence to power symbols is also a grossly jaded view.

Change from the inside retains the dignity of the individual seeking the change. Because it is a personal decision to take on a new vision, practice, goal or perception, the new state of change is generally positive, insofar as the individual is concerned, and thus empowering. Whereas the traditional methods of promoting change by its very nature, represent dynamics of power and often coercion of wills. The first, results in lasting-personal-wellbeing with the tools needed to improve on deficiencies, while the later results in temporary alleviation of symptoms of the problem, once the change agent is gone, more than likely, those affected will revert to old ways, as much as is possible.

Findings, thus far, indicate that agrarian peasants are worse off economically and politically because of the structural underpinnings of current global economic systems. The ties of dependency to national and international help agencies are such,
that in the long run, they create more dependency, more poverty, and greater destruction of nature and human cultural heritage, customs and resources.

The following table is a compilation of data gathered from recent reports by the World Bank and the United Nations. Its purpose is to numerically visualize some of the factors affecting national economies in their quest for development and improved conditions for their people.


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* Figure is based on 1995 projected estimates, preliminary figure only.

A quick look at population and density provide an idea of spread, while GNP denotes the total gains in one year. Take for example, Lesotho, a small country that is densely populated; such population pressures are bound to have an effect on the land, if they have not already! On the other hand, its literacy rate is high, meaning (in one possible permutation) that it could potentially have a populace that is capable of transitioning into other areas of production and still retain cultural dignity.

**C. Implications**

Is the world coming to an end! No. Despite the fact that, first world nations control the vast majority of the world's resources, in all its permutations, economic, natural, human, etc.; they are in the hands of a few select countries. Since, world war two, when the modern development agenda started in earnest, the poor countries of the
world have not only gone from being self sufficient, in most cases, but have become completely dependent on international donor or lending agencies. Not only that, but the structural set-up of institutions that provide assistance, from the large internationals donors such as the World Bank, to the local non-governmental organization, all tend to have the same patriarchal mannerisms, and the result seems always to instill the notion of dependency on more affluent nations. A whole culture of begging has been institutionalized and promoted as a means of keeping poor nations in check.

These have been the effects of development (i.e., change) in developing nations around the globe, yet what lessons have been learned? Can change continue as it is and result in a peaceful acquiescence by the vast majority of the peoples of the world? For how long?

There are certain, historic and undeniable “truths,” if you will, that permit a more optimistic vision of the future. In doing so, a global and historic perspective is needed. In the first place, wars, exploitation, and prejudice should not be marked as signs of despair but rather of a “stimulus to assuming the responsibilities of collective maturity” (Office of the Secretariat, 1999, p. 2). Such a vision makes sense when humanity as a whole is viewed as coming of age as a unified human race. Thus, the unification of the earth’s inhabitants is not only a possibility but a necessity, given the nature and scope of today’s most challenging issues; none is local or regional. Working together means understanding, caring, and equal lasting and meaningful solutions whatever the subject matter.

Great strides have been made towards a new stage of global consciousness, world events such as the great wars, the depression, the cold war and others have lead to the rise of institutions that would be unthinkable at the beginning of this century. Such things as the United Nations Commission for Human Rights or the War Crimes Tribunal that recently indicted Milosevich, the Yugoslav president, for crimes against humanity, would be impossible a lifetime ago. Or the World Bank, an institution that has exacerbated economic hardship on the world's poor, has also provided an opportunity that would otherwise not exist and has contributed to the unification of vastly different nations under one banner. It has promoted and funded educational
ventures in many countries, and has if nothing else, raised awareness that nations must spend more of their own resources for educating and training their citizens.

In one lifetime, women’s rights are recognized as equal to men’s, they are not practiced but intellectually women are now equal, and slowly struggling to make it a reality. Today, ethnic conflicts are no longer seen as normal dealings of relations among diverse peoples, but rather as aberrations of what should be. Poverty has been universally rejected as a priority of any economic system, and governments, at least in theory acknowledge their responsibility in taking care of all members of society. But fundamentally, the “human race is now endowed with the means needed to realize the visionary goals summoned up by a steadily maturing consciousness” (Office of the Secretariat, 1999, p. 6).

The need for change is evident, if new levels of global consciousness are to be achieved, however, an element of change from within is needed, though, no doubt, global circumstances will continue to mold the way individuals ultimately choose to change.
## APPENDIX A

### SOCIAL CHANGE THEORIES

| EQUILIBRIUM THEORIES  | Evolution and Neo-Evolutionary: Change progresses from lower stages of development to higher stages (from primitive to modern)  
|                      | Structural - Functional: Change is adaptive rather than transformative  
|                      | Systems: Change comes from a perceived malfunctioning in the system and rationalizes the need for introducing innovations to respond to new social needs |
| CONFLICT THEORIES    | Marxist and Neo-Marxist: Social change is a struggle waged among societies restless, competing classes  
|                      | Cultural Revitalization or Social Movements: Change comes about as a result of high stress and disillusionment distorted cultural world view  
|                      | Anarchistic or Utopian: Change tales on radical overtones but never leaves the paper, thus becoming a 'thought experiment' only |
| OTHER THEORIES       | Dialectical Approach: Change takes place both from the equilibrium and conflict camps, they are complementary (Dahrendorf, 1967; Paulston, 1977)  
|                      | Research, Development, and Diffusion Model:  
|                      | Focused on the individual; change comes from rational sequence in the evolution and application of al long period; for passive rational clients only! (Haverlock, 1971)  
|                      | Empirical - Radical: Assumption is people are guided by reason, hence change comes about through demonstration  
|                      | Power - Coercive: Change comes by imposing on those with less power  
|                      | Normative - Re-Educative: Problem solving models of change (CERI, 1973)  
|                      | Induced Innovation: Change is based on cost and benefits maximization, demanders for change can exert political pressures for obtaining their needs (Ruttan & Hayami, 1971)  
|                      | Structural Change: Development is an identifiable process of growth and change whose main features are similar in all countries (Todaro, 1989) |
APPENDIX B

TROPICAL AND SUB-TROPICAL REGIONS OF THE WORLD

Note: The Tropics of Cancer and Capricorn are at 23.5 degrees north and south latitude respectively. The Sub-Tropics (outlined on the map) go up to 30 degrees north and south.
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